

## Dr. Daniel J. Branagan

Extensive research and development in rapid solidification processing and nanoscale science and technology

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**Education:** Dr. Branagan earned his BS degree in Metallurgical Engineering at Michigan Technological

University and his Ph.D in metallurgy from Iowa

State University where he did his graduate research at DOE's Ames Laboratory.

**Work experience:** After receiving his undergraduate degree, Dr. Branagan worked as a Welding Inspector and metallurgical laboratory assistant with Oy Tampella Ab in Tampere Finland. After graduating with his PhD, he worked at the

INL, first as a post-doctoral researcher for two years and then later as a staff scientist for about five and a half years until starting The NanoSteel Company, where he is currently employed as Chief Technical Officer.

Professional endeavors: Dr. Branagan has always strived to return value to the American taxpayer and has been involved with spinning out two companies from the INL. In 1998, GA (Gas Atomized) Powders was formed which specialized in the manufacture and distribution of coercive magnet powder and injection molded magnet materials/ magnets. During the first year of formation, this company was bought out by the industry leader Magnequench International, which currently offers these materials worldwide. In 2002, Dr. Branagan left the INL to form The Nanosteel Company, which specializing in the production, distribution, and application of advanced amorphous and nanocomposite coatings, hardfacing, and bulk industrial steel products.

## Patents:

- ▶ U.S. Patent 6,022,424 Atomization Methods for Forming Magnet Powders
- ▶ U.S. Patent 6,125,912 Advance Neutron Absorber Materials
- ▶ U.S. Patent 6,258,185 Methods of Forming Steel
- ▶ U.S. Patent 6,689,234 Hard Metallic Materials, Hard Metallic Coatings, Methods of Processing Metallic Materials and Methods of Producing Metallic Coatings
- ▶ U.S. Patent 6,767,419 Metallic Coating and Method of Forming Hardened Surfaces

## Licensing information

For information on licensing INL technologies such as those developed by Dr. Branagan, contact the Lead Account Executive for Industrial Processing and Manufacturing:

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